<u>REMARKS</u>

In the Office Action, the Examiner rejected claims 1 - 3, 5 - 11, 25 - 27, and 29 - 35 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Number 6,633,899 ("Coward") in view of U.S. Patent Number 6,208,720 ("Curtis"). The Examiner also rejected claims 4, 15, 16, 20 - 24, 28, 39, 40, and 44 - 48 under 35 U.S.C. § 103(a) as being unpatentable over Coward in view of Curtis and further in view of U.S. Patent Application Publication Number 2002/0010776 ("Lerner"). The Applicant respectfully traverses the Examiner's rejections and summits the following arguments in favor patentability.

The Examiner restricted claims 49 - 53 as being directed to an invention that is independent or distinct from the invention originally claimed. The Applicant respectfully traverses the restriction and submits the following arguments in favor of maintaining claims 49 – 53 with the present application.

Items 2 and 3 of the Office Action

The Examiner restricted claims 49 - 53 as being directed to an invention that is independent or distinct from the invention originally claimed. As such, the Examiner stated that the claims directed to the originally presented invention have been constructively elected. The Applicant respectfully traverses this restriction and maintains that claims 49 - 53 recite an invention that differs from the original claims only in terms of scope.

In claim 49, the Applicant recites a service control message broker that operates in service control layer as similarly recited in original claim 1. This message broker is in communication with a plurality of service providers and in communication with a plurality of transport association controllers (TACs). A system entity, as originally recited in claim 1, may include a service provider. Original claim 2 recited that system entities could also include TACs.

Claim 49 also recites an integrated service controller in the service control layer that communicates with the message broker. The ISC maintains an event registration list and a message registration list relating to a plurality of services provided by a plurality of service providers. The Applicant recited an ISC in originally presented claim 2. The ISC

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of claim 49 recites features similarly described in other originally presented claims that depend from claim 1.

The Examiner states that the message broker of claim 49 differs from the message broker originally presented in claim 1. The message broker of originally presented claim 1 only differs in the fact that it recites additional limitations. However, the message broker of originally presented claim 1 is in communication with a plurality of system entities, such as service providers and TACs, because it provides "message" processing between these entities. As such, the Examiner is incorrect in stating that claim 49 is an invention that is different from the Applicant's originally presented claims.

For at least these reasons, the Applicant maintains that claim 49 only recites an invention that varies in scope from the originally presented claims. Since claim 49 and its dependent claims do not recite a different invention, they must be examined. The applicant reminds Examiner that the two required criteria when making a restriction include determinations of whether: (1) the inventions are distinct; *and* (2) there would be a serious burden on the Examiner if restriction is not required. MPEP § 803. The applicant has shown that the inventions are not distinct. Regardless, the applicant hardly thinks the burden on the Examiner would be serious since claim 49 is arguably broader in scope than claim 1 (i.e., the Examiner's presently cited, albeit inferior, references should also apply to claim 49). In this regard, the Applicant respectfully requests a new Non Final Office Action that addresses claims 49 - 53.

Item 5 of the Office Action

The Examiner states in item 5 of the Office Action that the Applicant's claims are replete with the phrasing of generally non limiting language such as "configured to". The Examiner further states that this language does not limit the claim scope but rather merely suggests or makes optional certain steps to be performed. The Applicant respectfully disagrees. In making these observations, the Examiner references MPEP § 2111.04. Here, the MPEP merely states that such language "may raise a question as to the limiting effect of the language in a claim". However, one sentence later in this section, the MPEP states that the "determination of whether each of these clauses is a limitation in a claim depends on the specific facts of the case" (citing *In Hoffer v. Microsoft Corp.*, 405 F.3d

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1326, 1329, 74 USPQ2d 1481, 1483 (Fed. Cir. 2005) stating the court held that when a "whereby" clause states a condition that is material to patentability, it cannot be ignored in order to change the substance of the invention). When the Applicant states, for example, that at least one distributed message broker is configured to operate in a services control layer, the Applicant intentionally limits the invention to operate in a particular environment. The Applicant believes such is material to patentability because, among other reasons, the "configured to" clause describes an operational feature of one of the components as opposed to merely an intended result. *Id.* The Applicant further asserts that operation within a services control layer is material to patentability because the Applicant operates in a field of telecommunications where such terms are meaningful and relevant to those skilled in the art. In this regard, the Applicant believes the Coward reference is useless as prior art because the field specifically relates to brokering messages for the installation and deinstallation of applications on a server as opposed to brokering messages between system entities of a telecommunications network as the Applicant claims. Regardless, the Applicant has amended claims 1, 4, 5, 7, 9 - 11, 15, 16, 20, 22 - 24, 39, and 51, in the interests of advancing prosecution, to reflect the Examiner's suggestion of using more "assertive" language.

Rejections

Claims 1 – 11, 15, 16, and 20 - 24

In claim 1, the Applicant recites a system for providing exchange of messages and associated data across a plurality of communication network system entities for a plurality of communications networks. The system includes at least one distributed message broker that operates in a services control layer and connectable to the plurality of communication network system entities of a plurality of communications networks. The at least one message broker provides message processing between a plurality of system entities and the message processing includes relaying and/or screening based on prioritization rules of at least one of customer classification, associated service classification, and system entity classification applied to a message classification of one or more messages communicated over the plurality of communications networks between the plurality of system entities. The system also includes an integrated service controller

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(ISC) connectable with the message broker. The ISC classifies, registers, integrates, operates, and prioritizes a new service. The Applicant has amended the "new service" of claim 1 to more explicitly recite a new telephony service for reasons stated hereinbelow.

The Examiner states that Coward teaches at least one distributed message broker that provides message processing between a plurality of system entities with Figures 1A and 1B; column 3, line 56 - column 4, line 10. Here, Coward merely teaches a broker that implements installation, deinstallation, and configuration of an application on a server. This broker communicates status information regarding the installation process to other processes or devices. Nowhere in these lines does Coward teach or even reasonably suggest message processing between system entities, as the Applicant claims. *See e.g.*, page 11, lines 21 - 22 and page 25, lines 16 - 18 of the Applicant's specification for definitions of entity.

The Examiner also states that Coward teaches relaying and screening based on prioritization rules of at least one of customer classification, associated service classification, and system entity classification at column 4, line 11 - column 5, line 9. Prioritization rules of the Applicant's claims generally relate to how an ISC dispatches a message. The Examiner states that an ISC is the equivalent of processor 1004 recited in Coward. The Applicant respectfully disagrees because, among other reasons, Coward specifically states that CPU 1004 is configured within a general-purpose computer system (i.e., general-purpose computer system 1002), whereas an ISC of the Applicant's claims provides for the dynamic integration of multiple services, organization of the customer preference information with regards to the communication services (i.e., telephony services), the monitoring of the transport, and the intelligent prioritization and distribution of messages. *See e.g.*, page 15, lines 10-13 of the Applicant's specification. Nowhere does Coward teach or reasonably suggest any type of telephony service.

The Examiner states that CPU "1004 inherently registers and operates new service such as new service with I/O devices or network 1014". The Applicant respectfully disagrees because, among other reasons, the message broker that Coward teaches is configured with CPU 1004 as opposed to being connectable to the CPU. For example, the Applicant claims an ISC that is connectable with the message broker as opposed to being configured with a message broker. Further in this regard, the message

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broker of Coward, as operable with CPU 1004, simply installs/de-installs and configures an application on a remote server such that the remote server can operate the installed application. *See e.g.*, column 3, lines 56 - column 4, line 11, and column 10, lines 6 - 29. Coward explicitly describes a message broker that is configured with the CPU as opposed to being connectable to the CPU as the Applicant claims. Regardless, Coward does not teach or reasonably suggest *operating* any application that the message broker installs on a remote server likely because the remote server is entirely capable of operating the installed application itself, as is known to those skilled in the art.

In the interests of advancing prosecution the Applicant has amended claim 1 to more explicitly define the new service of the ISC (i.e., of a service control layer) as a new *telephony* service, such as that used in the dynamic registration of the new telephony services. The Examiner states that Coward does not specifically disclose a message broker that is configured to operate in a service control layer; here, the Applicant entirely agrees. The Examiner states, however, like Coward, Curtis also teaches a method for providing exchange of messages with the Examiner referencing a litany of components. The Applicant respectfully disagrees with this assertion. With the service control layer 107 (i.e., components 108, 110, 112, 114, 116, in 118) of Curtis, Curtis teaches management and offerings of various telecommunication services. See e.g., column 7, lines 1 - 12 of Curtis. Here, however, Curtis does not teach message brokering of the Applicant's claims which provide message processing between a plurality of system entities including relaying and screening based on prioritization rules. In fact, Curtis does not teach or reasonably suggest any type of message brokering whatsoever.

The Examiner uses Curtis to supplement Coward only because Curtis is directed to telecommunications whereas Coward is not. Coward only teaches message brokering between devices. The only reference that Coward makes to message brokering with a communications network regards an internet network or an intranet network, not the communications associated with telephony as the Applicant claims. See e.g., column 10, lines 30 - 47 of Coward. The Applicant maintains that Coward's lack of teachings in the field of telecommunications is due to the fact that Coward is a non analogous art. Simply because two fields use electronic devices (e.g., servers, computers, etc.) is not sufficient

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for determining that the two references may be combined to teach that which the Applicant claims.

The Examiner states that "by having the message devices operating in a services control layer, Curtis provides a method for accommodating a variety of systems and accommodating a variety of services. Furthermore, the overall teachings of Curtis provide a system with improved protection against fraud and a system which reduces losses.... Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to look to the invention of Curtis for improving the method of Coward by providing a system with improved from protection against fraud any system which reduces losses...". The statements by the Examiner are simply naked assertions and do not show where the references themselves teach or reasonably suggest the motivation to combine.

The Applicant reminds the Examiner that there are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art." *See e.g., In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998); *see also*, MPEP § 2143.01. The test for any *implicit* showing of motivation to combine is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). The nature of the problem to be solved in Curtis, as the Examiner points out, is fraud prevention through the use of threshold detection engines. *See e.g.*, column 1, lines 19 - 22 and column 2, lines 26 - 49 of Curtis. The nature the problem to be solved in Coward, however, is message brokering to enable communications among a plurality of devices throughout a process that is performed on a remotely located server. *See e.g.*, column 2, lines 24 - 30 of Coward. The Applicant maintains the teachings of Coward and Curtis regard non analogous fields. Accordingly, the Applicant maintains that one of ordinary skill in the art could not have been motivated to combine the teachings of Coward and Curtis.

For the reasons stated hereinabove, the Applicant maintains that claim 1 is novel and nonobvious in view of the cited references. The Applicant, therefore, respectfully

requests reconsideration and allowance of claim 1. Claims 2 - 11 depend from independent claim 1 and inherit all of the novel and nonobvious features of the independent claim. For at least these reasons, claims 2 - 11 are also novel and nonobvious. These claims, however, recited additional features that further distinguish from the cited references. For example, claim 5 recites that the message broker employs message delivery parameters which affect the manner of delivery for the one or more messages of a message classification between identified origination-destination endpoints. The Examiner states that Coward teaches a message broker configured to employ message delivery parameters at column 4, line 11 - column 6, line 7 and line 37; the Applicant respectfully disagrees. Coward merely teaches a message broker that allows for updates to messages which devices in communication therewith may access. Nowhere, however, does Coward teach or reasonably suggest delivering a message.

Maintaining message updates (i.e., as Coward does) is vastly different from delivering messages between identified origination-destination endpoints, as the Applicant claims. Maintaining message updates forces a device to access the message broker to determine message changes. The message broker of the Applicant's claims, however, delivers messages between entities. For at least these reasons, Coward and Curtis, either alone or in combination, do not teach or reasonably suggest that which the Applicant claims. Accordingly, claim 5 is novel and nonobvious in view of the cited references. The Applicant, therefore, respectfully requests reconsideration and allowance of claim 5.

Another example of patentable distinction regards claim 6. In claim 6, the Applicant recites message delivery parameters that include at least one of timers, queuing priority order, one or more levels of message delivery guarantees, ordering of sequential messages, integrity of message delivery, and message duplication handling. The Examiner states that Coward teaches updates including errors at column 5, lines 40 - 43. Here, Coward simply teaches message updates that may include errors; but, based at least in part on the arguments in favor of patentability for claim 5, nowhere does Coward imply that these errors are used as message *delivery* parameters as the Applicant claims. Accordingly, Coward does not teach or reasonably suggest that which the Applicant claims. The Applicant respectfully requests reconsideration and allowance of claim 6.

Another example of patentable distinction regards claim 7. In claim 7, the Applicant recites that the message broker performs the message relay in screening prioritization of the one or more messages of a message classification based on static message operation prioritization rules. The Applicant states that Coward teaches such static message operation rules with the access list of the broker, referenced in column 4, line 42 - column 5, line 39. Here, Coward teaches an access list that is updated through device registration with the broker. Assuming that Coward's access list is even remotely similar to the Applicant's message operation privatization rules, Coward teaches a dynamic list as opposed to the static message operation prioritization rules of the Applicant claims. Accordingly, Coward does not teach that which the Applicant claims. For these reasons, claim 7 is novel and non-obvious in view of the cited references. The Applicant maintains that the cited references, either alone or in combination, neither teach nor reasonably suggest that which the Applicant claims. The Applicant, therefore, respectfully requests reconsideration and allowance of claim 7.

The arguments in favor of patentability for claim 7 apply to claim 8 as well. However, claim 8 recites that the static message operation privatization rules comprise at least one of security policies, resource allocation arbitration, reactivity to communication network conditions to ensure performance levels, and relationship definitions of associated messaging endpoints. The Examiner states that Coward teaches a relationship definition of associated message endpoints with listeners 116 and 120. The Applicant respectfully disagrees because, among other reasons, Coward does not teach any relationship between message endpoints. Listeners 116 and 120 of Coward simply register with broker 106 as listeners. These listeners access updates of the broker but do not communicate to one another. The broker of the Applicant's claims, however, processes messages between entities. For at least these reasons, claim 8 patentably distinguishes from the cited references. The Applicant, therefore, respectfully requests reconsideration and allowance of claim 8.

In yet another example of patentable distinction over the cited references, claim 10 recites that the message broker includes messages by which a serving system entity advertises capabilities and messages by which a client system entity identifies and obtains one or more references to methods associated with the serving system entity. The

Examiner states that such is taught by Coward at column 5, line 40 - column 6, line 24 and listeners 116 and 120. Here, Coward teaches that listeners 116 and 120 retrieve updates to messages that the broker maintains. Nowhere, however, does Coward teach or reasonably suggest where listeners 116 and/or 120 retrieve messages by which a serving system entity advertises capabilities and by which a client system entity identifies and obtains one or more references to methods associated with the serving system entity. Accordingly, Coward does not teach that which the Applicant claims. The Applicant maintains the claim 10 is novel and nonobvious view the cited references, either alone or in combination, and therefore respectfully requests reconsideration and allowance of claim 10.

Claim 16 illustrates another example of patentable distinction over the cited references. In claim 16, the Applicant recites that the message broker exchanges one or more messages with the ISC in the service control layer of the at least one of the plurality of communication networks. The Examiner states Lerner teaches a message broker that exchanges one or more messages with an ISC interpreting Lerner's interface adapter as the Applicant's ISC. An ISC as recited in the Applicant claims, described hereinabove, and well known to those skilled in the art, is a telephony device. The ISC, again, classifies, registers, integrates, operates, and prioritizes a new service. Previously, Examiner stated that the ISC was taught in Coward's CPU. Now, the Examiner is stating that Lerner teaches an ISC in an interface adapter. Clearly, the Examiner's reliance upon two separate references (i.e., the CPU of Coward and the interface adapter of Lerner) with each having different functionalities, properties, and names does not properly suggest an ISC of the Applicant's claims and cannot be a reasonable motivation to combine.

Regardless, the interface adapter of Lerner, which the Examiner interprets as the Applicant's ISC, does not interface (e.g., exchange messages) with message broker 390 of Lerner. For at least these reasons, Lerner does not teach that which the Applicant claims. The Applicant maintains that Lerner, either alone or in combination with Coward and/or Curtis, does not teach or reasonably suggest that which the Applicant claims. The Applicant, therefore, respectfully requests reconsideration and allowance of claim 16.

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Claims 25 - 35, 39, 40, and 44 - 48

In claim 25, the Applicant recites a method for providing exchange of messages and associated data across a plurality of communication network system entities for a plurality of communications networks. The method includes configuring at least one message broker in a service control layer to establish connections with a plurality of communication network system entities of at least one communications networks. The method also includes receiving and processing one or more messages from the system entities, wherein the processing includes at least one of: relaying and screening based on prioritization rules of at least one of customer classification, associated service classification, and system entity classification applied to a message classification of one or more messages communicated over the at least one communications network between the plurality of system entities. Additionally, the method includes configuring an integrated service controller (ISC) to classify, register, integrate, operate, and prioritize a new service. The Applicant has amended claim 25 more explicitly state that the new service is a new telephony service as similarly amended in claim 1.

Claim 25 recites a method claim having process elements that correspond to the system recited in claim 1. The Examiner, therefore, rejected claim 25 as being unpatentable over Coward in view of Curtis for reasons similarly recited in the rejections for claim 1. As such, the arguments in favor of patentability for claim 1 apply herein. Accordingly, the Applicant also respectfully requests reconsideration and allowance of claim 25.

Claims 26 - 35, 39, 40, and 44 - 48 depend from independent claim 25 and inherit all of the novel and nonobvious features of the independent claim. For at least these reasons, these claims are also novel and nonobvious. However, these claims recite additional features that further distinguish from the cited references. For example, claims 29 - 32, 34, and 40 respectively recite subject matter of claims 5 - 8, 10, and 16. The arguments in favor of patentability for claims 5 - 8, 10, and 16 respectively apply herein as well. For at least these reasons, the Applicant respectfully requests reconsideration allowance of these claims.

CONCLUSION

Based upon the foregoing, the Applicant believes that all pending claims are in condition for allowance and respectfully requests. In the event that a telephone conversation would further prosecution and/or expedite allowance, the Examiner is invited to contact the undersigned.

Respectfully submitted,

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